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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,627	01/24/2006	Takashi Ohkubo	Q76804	2614
23373 7590 12/03/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
KALAFUT, STEPHEN J				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
12/03/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/565,627

Applicant(s)

OHKUBO ET AL.

Examiner

Stephen J. Kalafut

Art Unit

1795

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-39 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 5, 6, 10, 12-14, 16, 18, 20, 21, 23-28 and 30-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gernov *et al.* (US 6,194,099) in view of Nishimura *et al.* (EP 858,119), for reasons of record.

Claims 2, 7-9, 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gernov *et al.* in view of Nishimura *et al.* as applied to claims 1, 10 and 21 above, and further in view of Nanba *et al.* (US 2006/0035149), for reasons of record.

Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gernov *et al.* in view of Nishimura *et al.* as applied to claims 1 and 14 above, and further in view of Nishimura *et al.* (US 2003/0049443), for reasons of record.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gernov *et al.* in view of Nishimura *et al.* as applied to claim 1 above, and further in view of Mizumoto *et al.* (US 5,541,022), for reasons of record.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gernov *et al.* in view of Nishimura *et al.* as applied to claim 1 above, and further in view of Okada *et al.* (US 6,534,218), for reasons of record.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gernov *et al.* in view of Nishimura *et al.* as applied to claim 1 above, and further in view of Armand *et al.* (US 6,085,015), for reasons of record.

Claim 17, for reasons of record, is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's arguments filed 21 August 2008 have been fully considered but they are not persuasive.

Applicants argue that Gernov *et al.* teach proceeding “entirely opposite to the feature of the present invention”, which is “an electrode having low porosity”. This is not persuasive because the specific porosities of Gernov *et al.* and at present are not entirely opposite, but differ in degree. In column 2, lines 65-67, the lower recited value is 40%. Although above 25%, this would not be “entirely opposite”. Gernov *et al.* teach against excessive porosity (column 2, line 65 through column 3, line 3) and in favor of greater active material volumetric density (column 4, lines 7-24). The section in column 10, recited by applicants for its “highly porous structure”, refers to “access to electrolyte during filling or cycling of the cells”, which clearly deals with liquid electrolyte cells. However, Gernov *et al.* also disclose solid and gel polymer electrolytes (column 17, lines 19-45). The cells employing these electrolytes would not need high porosity in their electrodes, since there is no need therein for access to liquid electrolyte.

Applicants argue that Nishimura *et al.* does not mention carbon fiber or electrode porosity, but instead lithium dendrite suppression. Nishimura *et al.* discloses a polymer electrolyte cell, and teach the incorporation of the polymer electrolyte into the electrodes of the cell (column 4, lines 38-44). This would be relevant to Gernov *et al.* because they disclose polymer electrolytes. While not disclosing fibers, Nishimura *et al.* disclose carbon as a conductive electrode component (column 7, lines 11-16).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 571-272-1286. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen J. Kalafut/
Primary Examiner, Art Unit 1795

Application Number**Application/Control No.**

10/565,627

Examiner

Stephen J. Kalafut

**Applicant(s)/Patent under
Reexamination**

OHKUBO ET AL.

Art Unit

1795